

ORIGINAL



0000179128

AZ CORP COMMISSION
DOCKET CONTROL

2017 APR 19 P 3:55

Arizona Corporation Commission

DOCKETED

APR 19 2017

DOCKETED BY
GB

1 Thomas A. Loquvam
2 Thomas L. Mumaw
3 Melissa M. Krueger
4 Amanda Ho
5 Pinnacle West Capital Corporation
6 400 North 5th Street, MS 8695
7 Phoenix, Arizona 85004
8 Tel: (602) 250-3630
9 Fax: (602) 250-3393
10 E-Mail: Thomas.Loquvam@pinnaclewest.com
11 Thomas.Mumaw@pinnaclewest.com
12 Melissa.Krueger@pinnaclewest.com
13 Amanda.Ho@pinnaclewest.com

14 Attorneys for Arizona Public Service Company

15 **BEFORE THE ARIZONA CORPORATION COMMISSION**

16 **COMMISSIONERS**

17 TOM FORESE, Chairman
18 BOB BURNS
19 DOUG LITTLE
20 ANDY TOBIN
21 BOYD DUNN

22 IN THE MATTER OF THE
23 APPLICATION OF ARIZONA PUBLIC
24 SERVICE COMPANY FOR A HEARING
25 TO DETERMINE THE FAIR VALUE OF
26 THE UTILITY PROPERTY OF THE
27 COMPANY FOR RATEMAKING
28 PURPOSES, TO FIX A JUST AND
REASONABLE RATE OF RETURN
THEREON, TO APPROVE RATE
SCHEDULES DESIGNED TO DEVELOP
SUCH RETURN.

DOCKET NO. E-01345A-16-0036

**ARIZONA PUBLIC SERVICE
COMPANY'S NOTICE OF FILING**

IN THE MATTER OF FUEL AND
PURCHASED POWER PROCUREMENT
AUDITS FOR ARIZONA PUBLIC
SERVICE COMPANY.

DOCKET NO. E-01345A-16-0123

1 APS provides notice that it is filing the attached testimony summaries of Ms.
2 Barbara Lockwood, Mr. Leland Snook, Mr. Charles Miessner, and Mr. Scott
3 Bordenkircher as Exhibits 1-4, respectively.

4 RESPECTFULLY SUBMITTED this 19th day of April 2017.

5
6 By: _____

7 Thomas A. Loquvam

8 Thomas L. Mumaw

9 Melissa M. Krueger

10 Amanda Ho

11 Attorneys for Arizona Public Service Company

12 ORIGINAL and fifteen (15) copies
13 of the foregoing filed this 19th day of
14 April 2017, with:

15 Docket Control
16 ARIZONA CORPORATION COMMISSION
17 1200 West Washington Street
18 Phoenix, Arizona 85007

19 COPY of the foregoing emailed / mailed
20 this 19th day of April 2017, to:

21 Albert Acken
22 Ryley Carlock & Applewhite
23 One N. Central Ave., Ste 1200
24 Phoenix, AZ 85004-4417

Ann-Marie Anderson
Wright Welker & Paoule, PLC
10429 South 51st Street., Suite 285
Phoenix, AZ 85009

25 Brendon Baatz
26 Manager
27 ACEEE
28 529 14th Street N.W., Suite 600
Washington, DC 20045-1000

Stephen Baron
Consultant
J. Kennedy & Associates
570 Colonial Park Drive, Suite 305
Roswell, GA 30075

1	Patrick Black	Kurt Boehm
2	Attorney	Attorney
3	Fennemore Craig	BOEHM, KURTZ & LOWRY
4	2394 East Camelback Road, Suite 600	36 East Seventh Street, Suite 1510
5	Phoenix, AZ 85016	Cincinnati, OH 45202
6	Bradley Carroll	Steve Chriss
7	Assistant General Counsel, State	Senior Manager, Energy Regulatory
8	Regulatory	Analysis
9	Tucson Electric Power Company	Walmart Stores
10	88 East Broadway Blvd.	2001 Southeast 10th Street
11	Mail Stop HQE910	Bentonville, AR 72716-5530
12	P.O. Box 711	
13	Tucson, AZ 85702	
14	John B. Coffman	Jody Cohn
15	John B. Coffman, LLC	Attorney
16	871 Tuxedo Blvd.	Boehm, Kurtz & Lowry
17	St. Louis, MO 63119	36 E. Seventh St., Suite 1510
18		Cincinnati, OH 45202
19	Jim Downing	Brittany L. DeLorenzo
20	PO Box 70	Corporate Counsel
21	Salome, AZ 85648	IO DATA CENTERS, LLC
22		615 N. 48th St.
23	Nicholas Enoch	Phoenix, AZ 85008
24	Attorney	
25	Lubin & Enoch, P.C.	Greg Eisert
26	349 North Fourth Ave.	Director Government Affairs Chairman
27	Phoenix, AZ 85003	Sun City Homeowners Association
28		10401 W. Coggins Drive
		Sun City, AZ 85351
	Patricia Ferre	Giancarlo Estrada
	P.O. Box 433	Kamper, Estrada and Simmons, LLP
	Payson, AZ 85547	3030 N. Third St., Suite 770
		Phoenix, AZ 85012
	Richard Gayer	Denis M. Fitzgibbons
	526 W. Wilshire Dr.	FITZGIBBONS LAW OFFICES, PLC
	Phoenix, Arizona 85003	P.O. Box 11208
		Casa Grande, AZ 85230

1	Al Gervenack	Jason D. Gellman
2	Robert Miller	Snell & Wilmer LLP
3	Property Owners & Residents	400 E. Van Buren Street, Suite 800
4	Association	Phoenix, AZ 85004
	13815 Camino del Sol	
5	Sun City West, AZ 85372	
6	Elijah Abinah	Meghan Grabel
7	Acting Director	Attorney for AIC
8	Utilities Division	Osborn Maledon, P.A.
9	Arizona Corporation Commission	2929 North Central Avenue
10	1200 W. Washington	Phoenix, AZ 85012
11	Phoenix, AZ 85007	
12	Tom Harris	Garry D. Hays
13	Chairman	Attorney for ASDA
14	Arizona Solar Energy Industries	Law Offices of Garry D. Hays, PC
15	Association	2198 E Camelback Rd, Suite 305
16	2122 W. Lone Cactus Dr. Suite 2	Phoenix, AZ 85016
17	Phoenix, AZ 85027	
18	Chris Hendrix	Kevin Hengehold
19	Director of Markets & Compliance	Energy Program Director
20	Wal-Mart Stores, Inc.	Arizona Community Action Association
21	2011 S.E. 10th Street	2700 n. 3rd St., Suite 3040
22	Bentonville, AR 72716	Phoenix, AZ 85004
23	Kevin Higgins	Timothy Hogan
24	Energy Strategies, LLC	Attorney
25	215 South State Street, Suite 200	Arizona Center for Law in the Public
26	Salt Lake City, UT 84111	Interest
27		514 W. Roosevelt St.
28		Phoenix, AZ 85003
	Steve Jennings	Thomas A. Jerigan
	AARP	139 Barnes Drive, Suite 1
	16165 N. 83rd Ave, Suite 201	Tyndall AFB, FL 32403
	Peoria, AZ 85382	
	Teena Jibilian	Alan Kierman
	Assistant Chief Administrative Law	Director of Real Estate & Special
	Judge	Counsel
	Arizona Corporation Commission	IO Data Centers
	1200 W. Washington	615 N. 48th Street
	Phoenix, AZ 85007	Phoenix, AZ 85008

1	Briana Kobor	Samuel L. Lofland
2	Program Director	Ryley Carlock & Applewhite
3	Vote Solar	One N. Central Ave., Ste 1200
	360 22nd Street, Suite 730	Phoenix, AZ 85004-4417
4	Oakland, CA 94612	
5	Curt Ledford	Craig Marks
6	McDonald Carano Wilson, LLP	Attorney
7	2300 W. Sahara Ave., Suite 1200	AURA
8	Las Vegas, NV 89102	10645 N. Tatum Blvd. Ste. 200-676
9		Phoenix, AZ 85028
10	Jay Moyes	Jason Moyes
11	Moyes Sellers & Hendricks Ltd.	Moyes Sellers & Hendricks Ltd.
12	1850 N. Central Ave., Suite 1100	1850 N. Central Ave., Suite 1100
13	Phoenix, AZ 85004	Phoenix, AZ 85004
14		
15	Michael Patten	Greg Patterson
16	Attorney	Attorney
17	SNELL & WILMER L.L.P.	Munger Chadwick
18	One Arizona Center	916 West Adams Suite 3
19	400 E. Van Buren Street, Suite 1900	Phoenix, AZ 85007
20	Phoenix, AZ 85004-2202	
21	Ebony Payton	Robert L. Pickels, Jr.
22	139 Barnes Drive, Suite 1	Sedona City Attorney's Office
23	Tyndall AFB, FL 32403	102 Roadrunner Drive
24		Sedona, AZ 86336
25	Daniel Pozefsky	Steven Puck
26	Chief Counsel	Director Government Affairs
27	RUCO	Sun City Homeowners Association
28	1110 W. Washington, Suite 220	10401 W. Coggins Drive
	Phoenix, AZ 85007	Sun City, AZ 85351
	Pat Quinn	Kaitlyn A. Redfield-Ortiz
	AURA	Lubin & Enoch, P.C.
	5521 E. Cholla St.	349 N. 4th Avenue
	Scottsdale, AZ 85254	Phoenix, AZ 85003

1	Court Rich	Rob Robbins
2	Attorney	President
3	Rose Law Group, pc	Property Owners & Resident
4	7144 East Stetson Drive, Suite 300	Association
	Scottsdale, AZ 85251	13815 Camino del Sol
		Sun City West, AZ 85372
5	Lawrence Robertson, Jr.	Timothy Sabo
6	Attorney At Law	Snell & Wilmer
7	210 West Continental Road	400 East Van Buren
	Suite 216A	Suite 1900
	Green Valley, AZ 85622	Phoenix, AZ 85004
8		
9	Jeff Schlegel	Thomas E. Stewart
10	SWEEP	General Manager
	1167 W. Samalayuca Dr.	Granite Creek Power & Gas LLC
	Tucson, AZ 85704	5316 East Voltaire Avenue
11		Scottsdale, AZ 85254-3643
12	Sheryl A. Sweeney	Gregory W. Tillman
13	Ryley Carlock & Applewhite	Senior Manager, Energy Regulatory
14	One N. Central Ave., Ste 1200	Analysis
	Phoenix, AZ 85004-4417	Wal-Mart Stores, Inc.
15		2011 S.E. 10 th Street
		Bentonville, AR 72716
16	Emily A. Tornabene	Andy Kvesic
17	LUBIN & ENOCH, PC	Director
18	349 North Fourth Avenue	Legal Division
	Phoenix, AZ 85003	Arizona Corporation Commission
19		1200 W. Washington
		Phoenix, AZ 85007
20	Scott Wakefield	Paul J. Walker
21	Attorney	Executive Director
22	Hienton & Curry, P.L.L.C.	ConservAmerica
	5045 N. 12th Street, Suite 110	971 South Centerville Road
	Phoenix, AZ 85014-3302	PMB 139
23		Sturgis, MI 49091
24	Anthony Wanger	Charles Wesselhoft
25	President	Deputy County Attorney
26	IO Data Centers	Pima County
	615 N. 48th Street	32 North Stone Ave., Suite 2100
	Phoenix, AZ 85008	Tucson, AZ 85701
27		
28		

1 Karen White
2 Attorney
3 Air Force Utility Law Field Support
4 Center
5 AFLOA/JACL-ULFSC, 139 Barnes Dr.
6 Tyndall AFB, FL 32403

Ken Wilson
Western Resource Advocates
2260 Baseline Road, Suite 200
Boulder, CO 80302

5 Warren Woodward
6 200 Sierra Road
7 Sedona, AZ 86336

Gary Yaquinto
President & CEO
Arizona Investment Council
2100 N. Central Avenue, Suite 210
Phoenix, AZ 85004

8 Ellen Zuckerman
9 Senior Associate
10 4231 E. Catalina Drive
11 Phoenix, AZ 85018

Cynthia Zwick
2700 N. 3rd Street, Suite 3040
Phoenix, AZ 85004

12
13 Bruce Morgan
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Exhibit 1

DIRECT SETTLEMENT TESTIMONY OF BARBARA D. LOCKWOOD

SUMMARY

This Settlement was the result of nearly three months of formal and informal negotiations between more than 40 parties representing diverse interests in the rate case. The Signing Parties include Commission Staff, RUCO and other residential advocates, municipalities, unions, commercial and industrial stakeholders, in addition to residential and commercial solar installers and advocates.

My testimony touches upon all the provisions of the Agreement at a high level, and describes the agreed upon revenue requirement terms, including the revenue increase, capital structure, depreciation schedules, and deferrals. Additionally, my testimony describes the agreed upon rate design provisions including new residential and commercial rate options.

My testimony also discusses full grandfathering provisions for existing solar customers as well as provides an overview of how the Value and Cost of Solar Decision will be implemented for new solar customers moving away from the current net metering system. My testimony states that through a separate confidential agreement, APS, Industry Representatives and solar advocates have committed to stand by the settlement agreement and refrain from seeking to undermine it through ballot initiatives, legislation or advocacy at the ACC.

My testimony also details a new program that will focus on providing solar to low and moderate income customers and continuation of a buy-through program for large customers. Lastly, my testimony describes many of the customer benefits of this Agreement and why it is in the public interest.

SETTLEMENT REBUTTAL TESTIMONY BARBARA D. LOCKWOOD

SUMMARY

My testimony discusses discrete aspects of several parties' direct settlement testimony. First, I explain that the adjustment for the Resource Comparison Proxy of \$0.02/kWh is not based on a calculation of actual system conditions, nor does it reflect anything other than a negotiated settlement to resolve this proceeding, contrary to the testimony of EFCA's James Heidell. I also demonstrate that the Settlement Agreement directly resolved what DG customers will be paid for exported energy after 10 years, despite the assertions made by SEIA's Sara Birmingham.

I also discuss concerns raised by several non-settling parties. In response to AARP and SWEEP, my testimony highlights that the 90-day trial period strikes the right balance between modernizing rate design and permitting customers the option of selecting basic rates. By taking service under a time-of-use or demand rate for 90 days, new customers will be exposed to and become familiar with more modern rates. Although these customers have the option to return to basic rates, this 90-day trial will also give them the opportunity to reduce their bills and lower

system costs by responding to price signals. I also explain that APS welcomes stakeholder feedback on the transition plan to this new rate structure, but has serious reservations about a "transition plan by committee" as suggested by AARP.

In response to concerns about the Settlement BSCs, my testimony explores the rationale behind BSCs, and that they not only enhance customer bill and utility revenue stability, but also fairly apportion cost according to causation. Moreover, the Settlement BSCs, which range between \$10 - \$15 for most customers, reflect a compromise of positions—they are not as high as APS's requested \$24, but not as low as SWEEP's proposed \$8.

Finally, my testimony explores a few unrelated concerns raised by different witnesses:

- That the \$15 million refund of collected DSM funds is an opportunity to reduce the first year impact of this rate case and return customer money now, rather than wait to refund the money until some undetermined time (SWEEP);
- The settlement process was fair and demonstrates the value of collaborating to resolve complicated policy issues through settlement, rather than litigating those issues and forcing binary, "win/lose" outcomes (ED-8/McMullen);
- The Settlement's AMI policy is not discriminatory, but instead appropriately reflects actual cost differences between serving AMI and non-AMI customers (Warren Woodward); and,
- Staff's fuel audit offers many excellent recommendations for strengthening APS's fuel program, but one of audit recommendations should be postponed until APS can implement all suggested changes, and another recommendation should be modified to permit flexibility for system-reliability purposes.

Exhibit 2

DIRECT SETTLEMENT TESTIMONY OF LELAND R. SNOOK

SUMMARY

The Settlement Agreement is in the public interest and should be approved by the Commission. The process was one of significant give and take among the parties. While the end result does not give any particular party every outcome they wanted in this proceeding, the result is balanced and will result in just and reasonable rates for APS's customers. As a result of this Settlement Agreement, APS will receive a base rate increase of \$362.58 million, for a total adjusted test year revenue requirement of \$3,251,480,000. APS's fair value rate base is \$9,990,561,000 and the fair value rate of return 5.59%.

My testimony addresses the rate treatment related to the installation of SCRs on Four Corners Power Plant Units 4 and 5, which includes both a cost deferral and holding this docket open for a step increase proceeding to include the SCR costs in rates prior to APS's next general rate case. I also address the cost deferrals related to the OMP, which will provide APS the potential to recover these costs in the future in a subsequent rate case, and changes in Arizona property tax rates, which will allow for actual property tax expense incurred over the period rates are in effect to be recovered in rates over time.

I also address provisions related to APS's cost of service study and the proposed TEAM, which would address changes related to Federal corporate tax reform if such reform occurs after the conclusion of this case, but prior to the filing of APS's next rate case.

Next, I address several changes to APS's large and extra-large commercial rates. I describe APS's rate schedule E-32 L Aggregation feature and the Economic Development Service Schedule 9, which will help facilitate Economic Development in APS's service territory, and APS's successor rate to the AG-1 large customer buy-through program, AG-X. Lastly, I address modifications to three of APS's existing adjustment mechanisms: 1) the LFCR mechanism; 2) the EIS; and 3) the TCA mechanism.

SETTLEMENT REBUTTAL TESTIMONY OF LELAND R. SNOOK

SUMMARY

Mr. Downing has mischaracterized the OMP and its purpose. Without refuting every flaw in Mr. Downing's testimony, the load figures quoted include a large long-term wholesale transaction that terminated during the period and Mr. Downing does not account for the fact that APS has a number of long-term purchase agreements that are expiring. Further, Mr. Downing fails to recognize that APS has closed almost 800 MW of coal-fired resources during the period of his comparison. The OMP is a unique, fast-ramping, flexible resource that can be started and stopped multiple times per day, if necessary, and can reach its full production capability very fast compared to traditional generating units. This type of flexible resource is critical in the world we

live in now with a myriad of non-dispatchable intermittent renewable resources connected to the grid. The phenomenon of the duck curve, which is discussed in more detail by APS witness Charles Miessner in his Direct Settlement testimony, did not exist in 2008, but is real today and getting more pronounced year by year. The OMP will be a critical tool in modernizing the grid to reliably keep the lights on for APS's customers.

I also address Mr. Schlegel's testimony on BSCs, which ignores the purpose behind the BSC proposal in the Settlement; BSCs should be higher for basic rates and lower for more modern rates as a way of encouraging customers to try more modern rates. Further, the method to derive BSCs employed by Mr. Schlegel is the floor for a BSC, not the ceiling. Policy goals guide each jurisdiction on where to establish the BSC within reasonable boundaries. Mr. Schlegel also incorrectly states that the majority of APS's residential customers will see increased BSCs. In fact, the opposite is true - the Settlement actually reduces BSCs by approximately \$4 per month or 24% for over half of APS's customers.

Exhibit 3

DIRECT SETTLEMENT TESTIMONY OF CHARLES A. MIESSNER**SUMMARY**

In my Direct Settlement Testimony, I explain and support that under the Settlement:

- The requested net rate increase is \$94.624 million or 3.28%.
- An additional 9.28% of revenue requirement that is currently being recovered in adjutor rates will be transferred to base rates, with no net bill impact.
- The increase to various customer classes includes 4.54% for residential, 0.09% for small and extra-small general service, 2.21% for medium general service, 3.45% for large general service, 3.58% for extra-large general service, 1.19% for schools, 5.23% for houses of worship served under Schedule E-20, 3.35% for irrigation and 3.35% for outdoor lighting.
- The fuel and purchased power costs recovered in base rates will be \$0.030168 per kWh, which is a reduction from the current base fuel rate. In addition, the PSA mechanism will include funding for approved third-party energy storage contract costs.
- Residential customers will have new choices for a flat rate, a time-of-use (TOU) energy rate, and two TOU demand rates. All rate choices will be voluntary, although after May 1, 2018, new APS residential customers are required to give either TOU or demand-based rates a 90-day trial before switching to a flat rate plan (excluding customers that qualify for rate R-XS).
- A new technology pilot rate will also be available for up to 10,000 customers that adopt certain home energy technologies such as battery storage.
- The TOU energy and demand rates will have new on-peak hours of 3 p.m. to 8 p.m. weekdays to better reflect APS's peak hours and costs. An additional 4 holidays (10, total) will be exempt from on-peak charges.
- Residential customers that have already installed solar generation, or have an installation pending when new rates become effective in this proceeding, will be grandfathered on their existing rate schedule and net metering program for 20 years from their interconnection date.
- New residential solar customers can choose between the two TOU demand rates, the technology pilot rate, or the TOU energy rate. The latter will also include a grid access charge that, when combined with the rate itself, is designed to provide a bill savings from solar of \$0.105 per kWh before taxes and adjustments.
- As contemplated in Decision No. 75859, new residential solar customers will receive a bill credit for any excess generation that flows back to the grid, based on a purchase rate that they can lock in for 10 years. Each year, this rate will change, and the tranche of customers installing solar that year will lock that new rate in for 10 years. Per Decision No. 75859, the purchase rate may not be reduced by more than 10% between annual tranches. The Agreement sets the first-year purchase rate at \$0.129 per kWh.
- Limited income bill discounts will be simplified to 25% for the E-3 program and 35% for the E-4 medical equipment program, which provide the same average discount per customer.

Overall program funding will increase to accommodate potential growth in participation. In addition, the crisis bill program will receive funding of \$1.25 million per year.

- Residential customers not wishing to be served with standard AMI metering can choose a non-standard metering program with fees of \$50 upfront, if a change-out of an existing standard meter is required, and \$5 per month.
- Commercial and industrial customers will continue to be offered standard and TOU with demand rate choices similar to today. Extra-small general service customers will be offered a flat rate, a demand rate, and a TOU demand rate.
- Similar to residential, the on-peak hours are changed to 3 p.m. to 8 p.m. weekdays for the general service TOU rates, with the exception of the extra-large class.
- New rate choices include an aggregation discount for qualified large general service customers, a new rate for extra-large customers with extra-high load factors, an economic development rate program, a strengthened discount for military customers, an economic development option for rural municipalities, and a rate discount option for public schools.
- General Service customers are also offered a revised alternative generation buy-through program for up to 200 MW of customer participation.
- The current net metering structure for non-residential customers with solar generation will remain unchanged until the issue is addressed in a future proceeding.

SETTLEMENT REBUTTAL TESTIMONY OF CHARLES A. MIESSNER

SUMMARY

In my Settlement Rebuttal Testimony, I explain and support the following rebuttal positions:

- The Settlement BSCs for residential rates are fair. The residential BSCs proposed in the Settlement are fair and represent a compromise position. SWEEP's and AARP's claims and recommendations to the contrary are inaccurate, unsupported by evidence, and therefore, should not be adopted. SWEEP's and AARP's specific claim that the Settlement will result in significantly higher BSCs for most residential customers is simply inaccurate. In actuality, the Settlement results in significantly lower BSCs for over half of residential customers and a very modest \$1.33 per month increase for about 25% of residential customers.
- The new TOU rates have reduced on-peak hours, which better reflect times of high system peaks and costs yet balance individual customer interests. The revised TOU on-peak hours of 3 p.m. to 8 p.m. weekdays, excluding 10 holidays, is a significant reduction from the two current TOU rates, which have 12-hour and 7-hour on-peak periods respectively. The revised on-peak hours balance the need to reflect time of high system peaks and costs with individual customer interests for peak periods that are reasonably short.
- SWEEP's proposal that the on-peak period should be even further reduced to 3 hours, rather than the proposed 5-hour period, is unsupported by any evidence and is inconsistent with APS's times of high peak loads and costs. The record actually supports a 3 p.m. to 9 p.m. on

peak period but in the interest of customers' desire for shorter periods, APS initially proposed and continues to support the 3 p.m. to 8 p.m. on peak period. Any shorter time period could result in customers shifting usage from one peak hour to another peak hour, rather than to the off-peak period. For these reasons SWEEP's recommendation should not be adopted.

- The Settlement's implementation plan for residential flat rate R-Basic is a balanced approach with customer benefits. The plan, which provides general availability to the flat two-part rates through a transition period and continued availability after a 90-day trial on a TOU or demand rate, after the transition period, balances the objective of encouraging customers to move to a TOU rate, while maintaining customer access to a basic rate.
- Opinions by SWEEP and AARP that customers should be offered unrestrictive access to these outmoded two-part basic rates indefinitely would likely impede the progress towards rate reform that is contemplated by the Settlement. SWEEP and AARP want to preserve antiquated rate choices, while the Settlement moves towards more modern rate choices. For these reasons, the 90-day trial approach should be approved.
- The rate design for E-32 L, including the ratchet feature, is fair and provides appropriate cost-based incentives for energy storage. The proposed rate E-32 L for large commercial and industrial customers, which retains its existing ratchet demand rate feature, is common in the utility industry and helps ensure that customers pay for the grid infrastructure costs necessary to serve them. It also provides incentives for energy storage and energy efficiency that better matches the customer's bill savings with the utility's cost savings, minimizing the shift of unrecovered grid costs to other customers. Furthermore, the ratchet is important to help focus technologies that reduce load in summer months, when the load reduction is needed, and not over-reward load reduction in the winter when load reduction is generally not needed.
- EFCA's claim that the ratchet will eliminate any first year savings from energy storage and will generally impede the adoption of energy storage and energy efficiency is unfounded. In fact, APS customers served under the rate have continued to implement energy efficiency investments, even with the ratchet feature.
- EFCA's other rate design proposals are speculative, not supported by credible evidence and could result in unintended risks to customers. For these reasons, APS believes that EFCA's proposals should not be adopted.

Exhibit 4

SETTLEMENT REBUTTAL TESTIMONY OF SCOTT B. BORDENKIRCHER

SUMMARY

My testimony focuses on explaining the benefits of APS's AMI system and the importance of AMI metering for grid modernization. AMI technology benefits APS customers in many ways and also provides APS's system operators critical visibility into the day-to-day operation of the grid. This supports the Company in its efforts to maintain the overall health and reliability of the grid.

Additionally, my testimony discusses many of the concerns raised about AMI meters; however, silence on any particular point is not meant to indicate acceptance. My testimony addresses Intervenor Woodward's concerns about privacy and cybersecurity. Protecting customer information is a critical priority for APS. To accomplish that protection, APS complies with all Commission regulations, approved rate and service schedules, state statutes, and federal regulations regarding privacy and security of customer information.

I also address allegations of fire risk and damage to, or interference with, household appliances caused by AMI meters. APS has no knowledge of increased risk of fires or damage to household appliances caused by AMI meters. APS is aware of less than five instances where AMI meters have interfered with other technologically-advanced transmitting equipment and in all of those instances, APS has worked with the customer to resolve the issue.

I discuss the health concerns raised by Mr. Woodward and his two witnesses, Dr. Milham and Mr. Anderson. The radio frequency (RF) transmissions of the type utilized by AMI are regulated by the Federal Communications Commission (FCC). The Arizona Department of Health Services conducted a study on the safety of APS's AMI meters and the resulting report published in November 2014 confirmed that the meters tested were operating within the FCC's standards.

My testimony discusses the accuracy of AMI meters and addresses Mr. Woodward's concerns that AMI meters are less accurate than analog meters. To the contrary, due to there being no moving parts in an AMI meter, it maintains greater long-term accuracy than analog meters, which wear and degrade over time. Both of APS's AMI vendors test and certify for accuracy 100% of the meters they produce and send to us.

Lastly, my testimony addresses two specific documents cited by Mr. Woodward: the comments of Northeast Utilities (Woodward Exhibit B) and a 2010 White Paper from the Electric Power Research Institute (EPRI) (Woodward Exhibit V).